

WHAT IS CLAIMED IS:

1. A method of displaying part of an image field on a display at a client device, the method comprising the client device:
 - responding to user selection at the client device of a location within the image field to request from a server over a network, a plurality of image tiles including a first image tile that represents a portion of the image field including the selected location and a plurality of further image tiles that represent portions of the image field surrounding the portion of the image field represented by the first tile;
 - receiving from the server via the network, the plurality of requested image tiles; and
 - displaying at least a part of the first image tile and the further image tiles on the display, wherein a total area of the first and further image tiles exceeds the area of the display.
- 10 2. The method of Claim 1, wherein each image tile is requested and received individually by the client device.
- 15 3. The method of Claim 1, wherein the client device identifies each tile to be received.
- 20 4. The method of Claim 1, wherein the client device identifies the location within the image field to the server and in response thereto the client device receives from the server the first and further tiles.
- 25 5. The method of Claim 1, wherein an image is generated from vector data, the client device being operable to request vector data for forming an image tile from the server.

6. The method of Claim 1, wherein each image tile is displayed on the display as it becomes available.
- 5 7. The method of Claim 1, wherein the first image tile is received first.
8. The method of Claim 1, wherein the area of the first image tile is less than the area of the display.
- 10 9. The method of Claim 1, wherein the first image tile and eight surrounding image tiles are requested and received in response to user selection at the client device of the location within the image field.
10. The method of Claim 1, wherein at least selected image tiles are initially received in a lower detail, and are then updated to higher detail subsequently.
- 15 11. The method of Claim 10, wherein each image tile is initially received in lower detail, and is then updated to a higher detail subsequently.
- 20 12. The method of Claim 1, wherein, subsequent to receipt of the first image tile and the plurality of further image tiles, additional image tiles are requested and received, the additional image tiles portions surrounding the first and further image tiles.
- 25 13. The method of Claim 12, wherein the additional image tiles are each received at least initially in lower detail.
14. The method of Claim 1, wherein, in response to user input at the client device requesting navigation in a selected direction with respect to displayed portion

of the image field, the client device is operable to request from the server, additional image tiles in the selected direction with respect to the received image tiles.

- 5 15. The method of Claim 14, wherein the user device is operable to display a pointer on the display and includes a navigation input control for controlling the position of the pointer, the method further including the client device responding to the cursor reaching a boundary zone of the display as a request for navigation in a direction represented by that boundary zone.
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16. The method of Claim 1, wherein the client device is operable to hold received image tiles in a cache in the client device.
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17. The method of Claim 16, wherein memory capacity constraints dictate that an cached image tile has to be discarded to make way for a newly received image tile, the image tile representative of an image portion furthest from the currently displayed portion of the image field is discarded.
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18. The method of Claim 16, comprising a first cache for holding decompressed image tiles and a second cache for holding compressed image tiles.
19. The method of Claim 1, wherein the image field is a map, and the image tiles are representative of respective portions of the map.
- 25 20. The method of Claim 19, wherein the map is defined in at least a first predefined scale, and the image tiles are derived from the map at a selected scale.
21. The method of Claim 20, wherein the selected scale is selectable by the user.

22. The method of Claim 20, wherein, subsequent to receipt of the first and further image tiles at the selected scale, a set of one or more image tiles are received at a different scale, the set of one or more image tiles at a different scale being cached in the client device.

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23. The method of Claim 1, wherein information relating to objects represented by parts of the image tiles are associated with the image tiles and wherein, in response to user selection of an object on the display, the information relating to the object is supplied to the user.

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24. The method of Claim 23, wherein supplying the information comprises providing information that was cached with the image tile at the client device.

15 25. The method of Claim 24, wherein supplying the information comprises requesting the information from the server via the network.

26. The method of Claim 1, wherein the user selection of a location is by selection of a location in a list of displayed favourites.

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27. The method of Claim 26, comprising adding a location to a list of favourites.

28. The method of Claim 1, wherein in response to a user entering an indication of a location at the client device, the client device is operable to request from a the server, a selection of candidate locations matching the indication, and then in response to user selection of one of the candidate locations a selected location request from a server over a network, the plurality of image tiles.

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29. The method of Claim 1, wherein the client device is a mobile telephone.

30. A method of supplying a part of an image field to a display at a client device, the method comprising a server:

- receiving one or more requests from a client device via a network; and
- in response thereto supplying a plurality of image tiles representative of respective portions of the image field and including a first image tile representing a portion at the centre of the image to be displayed on the display and a plurality of further image tiles representing portions surrounding the first image tile, whereby the total area of the image tiles exceeds the area of the display at the client device.

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31. The method of Claim 30, wherein each request is for a single image tile.

32. The method of Claim 30, wherein a request is for the plurality of image tiles.

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33. The method of Claim 30, wherein a request is for vector data for forming an image tile.

34. The method of Claim 30, wherein the first image tile is sent first.

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35. The method of Claim 30, wherein the area of the first image tile is less than the area of the display.

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36. The method of Claim 30, wherein at least selected image tiles are initially sent in lower detail, and are then updated to higher detail.

37. The method of Claim 36, wherein each image tile is initially sent in lower detail, and is then updated to higher detail.

38. The method of Claim 30, wherein, subsequent to sending the first image tile and the plurality of further image tiles, additional image tiles are sent representing portions surrounding the first and plurality of further tiles.
- 5 39. The method of Claim 38, wherein the additional image tiles are each sent at least initially in low detail.
- 10 40. The method of Claim 30, wherein, in response to receipt for additional image tiles in a selected direction with respect to the displayed image, sending the requested additional image tiles.
41. The method of Claim 30, wherein the image field is a map, and the image tiles are representative of respective portions of the map.
- 15 42. The method of Claim 41, wherein the map is defined in at least a first predefined scale, and the image tiles are derived from the map at a selected scale.
- 20 43. The method of Claim 42, wherein a request for image tiles includes an indication of a selected scale.
44. The method of Claim 43, wherein, subsequent to sending the first and further image tiles at the selected scale, a set of one or more image tiles are sent at a different scale.
- 25 45. The method of Claim 30, comprising supplying information relating to objects represented by parts of the image tiles with the image tiles.

46. The method of Claim 45, comprising supplying information relating to objects represented by parts of the image tiles in response to a request for such information from the client device.

5 47. A computer program product comprising a carrier medium having program instructions thereon, the program instructions being operable to program a client device to display part of an image field on a display by:

- responding to user selection at the client device of a location within the image field to request from a server over a network, a plurality of image tiles including a first image tile that represents a portion of the image field including the selected location and a plurality of further image tiles that represent portions of the image field surrounding the portion of the image field represented by the first tile;
- receiving from the server via the network, the plurality of requested image tiles; and
- displaying at least a part of the first image tile and the further image tiles on the display, wherein a total area of the first and further image tiles exceeds the area of the display.

10 48. The computer program product of Claim 47, wherein the client device is a mobile telephone.

15 49. A computer program product comprising a carrier medium having program instructions thereon, the program instructions being operable to cause a server to supply a part of an image field to a display at a client device by:

- receiving one or more requests from a client device via a network; and
- in response thereto supplying a plurality of image tiles representative of respective portions of the image field and including a first image tile representing a portion at the centre of the image to be displayed on the

display and a plurality of further image tiles representing portions surrounding the first image tile, whereby the total area of the image tiles exceeds the area of the display at the client device.

5 50. A client device comprising a processor, memory, a communication interface and a display, the client device being operable:

- to respond to user selection at the client device of a location within the image field to request from a server over a network, a plurality of image tiles including a first image tile that represents a portion of the image field including the selected location and a plurality of further image tiles that represent portions of the image field surrounding the portion of the image field represented by the first tile;
- to receive from the server via the network, the plurality of requested image tiles; and
- to display at least a part of the first image tile and the further image tiles on the display, wherein a total area of the first and further image tiles exceeds the area of the display.

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51. The client device of Claim 50, wherein the client device is operable to request and to receive each image tile individually.

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52. The client device of Claim 50, wherein the client device is operable to identify each tile to be received.

25 53. The client device of Claim 50, wherein the client device is operable to identify the location within the image field to the server and in response thereto to receive from the server the first and further tiles.

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54. The client device of Claim 53 wherein each image tile is displayed on the display as it becomes available.
55. The client device of Claim 50, wherein an image is generated from vector data and wherein the client device is operable to request vector data for forming an image tile from the server.
56. The client device of Claim 50, wherein the first image tile is received first.
- 10 57. The client device of Claim 50, wherein the area of the first image tile is less than the area of the display.
- 15 58. The client device of Claim 50, wherein the first image tile and eight surrounding image tiles are requested and received in response to user selection at the client device of the location within the image field.
59. The client device of Claim 50, wherein at least selected image tiles are initially received in a lower detail, and are then updated to higher detail subsequently.
- 20 60. The client device of Claim 50, wherein each image tile is initially received in lower detail, and is then updated to a higher detail subsequently.
- 25 61. The client device of Claim 50, wherein, subsequent to receipt of the first image tile and the plurality of further image tiles, additional image tiles are requested and received, the additional image tiles portions surrounding the first and further image tiles.
62. The client device of Claim 61, wherein the additional image tiles are each received at least initially in lower detail.

63. The client device of Claim 50, wherein, in response to user input at the client device requesting navigation in a selected direction with respect to displayed portion of the image field, the client device is operable to request from the server, additional image tiles in the selected direction with respect to the received image tiles.

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64. The client device of Claim 63, wherein the user device is operable to display a pointer on the display and includes a navigation input control for controlling the position of the pointer, the device further including the client device responding to the cursor reaching a boundary zone of the display as a request for navigation in a direction represented by that boundary zone.

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65. The client device of Claim 50, wherein the client device is operable to hold received image tiles in a cache in the client device.

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66. The client device of Claim 65, wherein memory capacity constraints dictate that an cached image tile has to be discarded to make way for a newly received image tile, the image tile representative of an image portion furthest from the currently displayed portion of the image field is discarded.

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67. The client device of Claim 65, comprising a first cache for holding decompressed image tiles and a second cache for holding compressed image tiles.

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68. The client device of Claim 50, wherein the image field is a map, and the image tiles are representative of respective portions of the map.

69. The client device of Claim 68, wherein the map is defined in at least a first predefined scale, and the image tiles are derived from the map at a selected scale.
- 5 70. The client device of Claim 69, wherein the selected scale is selectable by the user.
- 10 71. The client device of Claim 69, wherein, subsequent to receipt of the first and further image tiles at the selected scale, a set of one or more image tiles are received at a different scale, the set of one or more image tiles at a different scale being cached in the client device.
- 15 72. The client device of Claim 50, wherein information relating to objects represented by parts of the image tiles are associated with the image tiles and wherein, in response to user selection of an object on the display, the information relating to the object is supplied to the user.
73. The client device of Claim 72, wherein supplying the information comprises providing information that was cached with the image tile at the client device.
- 20 74. The client device of Claim 73, wherein supplying the information comprises requesting the information from the server via the network.
- 25 75. The client device of Claim 50, wherein the user selection of a location is by selection of a location in a list of displayed favourites.
76. The client device of Claim 50, wherein the client device is operable to add a location to a list of favourites.

77. The client device of Claim 50, wherein in response to a user entering an indication of a location at the client device, the client device is operable to request from a the server, a selection of candidate locations matching the indication, and then in response to user selection of one of the candidate locations a selected location request from a server over a network, the plurality of image tiles.

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78. The client device of Claim 50, wherein the client device is a mobile telephone.

10 79. A server comprising a processor, memory and a communications interface, the server being operable to supply a part of an image field to a display at a client device by:

- receiving one or more requests from a client device via a network; and

- in response thereto supplying a plurality of image tiles representative of respective portions of the image field and including a first image tile representing a portion at the centre of the image to be displayed on the display and a plurality of further image tiles representing portions surrounding the first image tile, whereby the total area of the image tiles exceeds the area of the display at the client device.

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